

Price Index



Series 09

Special Features / Options



Upon request: Cleanroom Class 1
(ISO class 3) tested by the Dryden
Engineering Company, CA

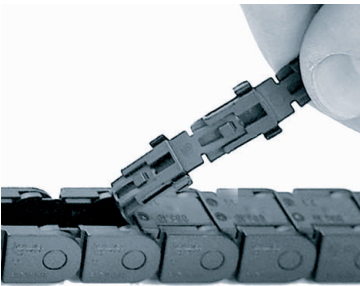


Flammability Class
VDE 0304 IIC UL94 HB



Low-noise

Assembly Tips



“Zipper-fast” opening and closing

Usage Guidelines



- If fast, zipper-like accessibility to cables is required
- If quick, easy insertion of cables with preassembled connectors is required
- If quiet operation is required
- If aesthetic design is required
- If high acceleration and travel speed is present



- If a more cost-effective, openable E-Chain is required
➤ **Series B09 E2 Micro**
- If cable installation without opening lids is possible
➤ **Series E08 E-Z Chain**
- If a closed tube system is required
➤ **Series R09 E2 Zipper Tube**

Features & Benefits

- 1 Zipper lids can be separated and joined at each link
- 2 Small pitch for low-noise and smooth operation
- 3 ‘Zipper-fast’ opening and closing
- 4 For high acceleration
- 5 Mounting bracket with integrated strain relief
- 6 Lightweight



Order Example: Complete E-Chain®

Please indicate chain length or number of links. Example:

3.28 ft (1 m) 09-20-038-0



E-Chain®

1 Set 080-20-12PZ

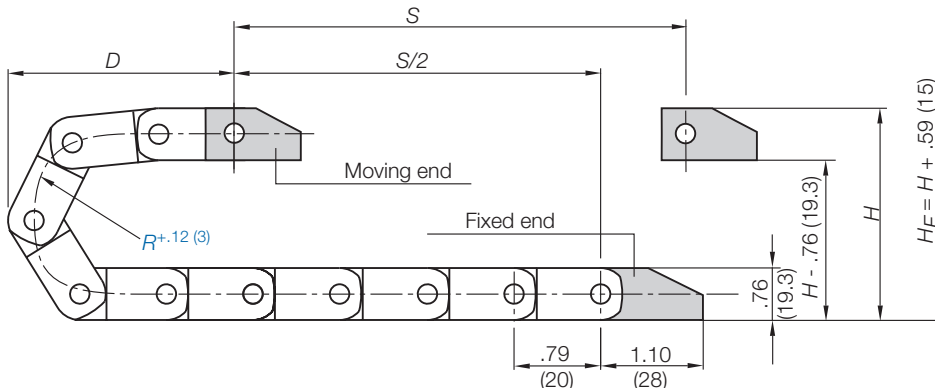
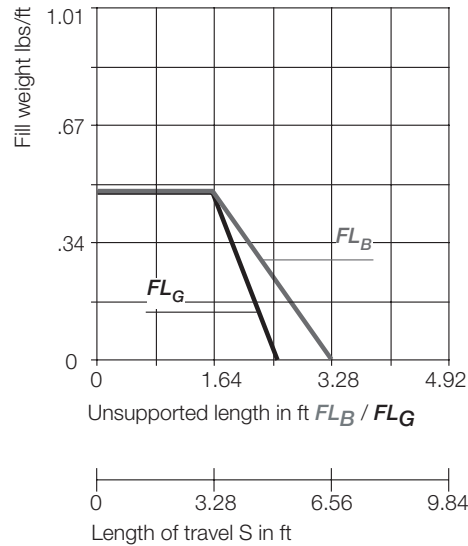
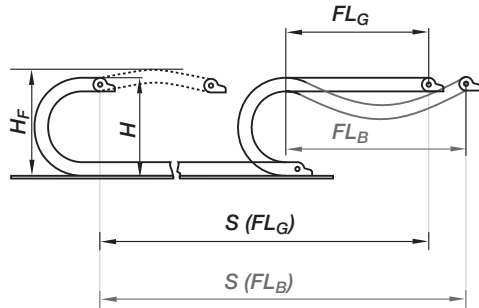


Mounting Bracket

E-Chain System® Zipper Series 09 Installation Dimensions

Short travel, unsupported length

- FL_B = unsupported with permitted sag
 - FL_G = unsupported with straight upper run
- Further information ► Design, Chapter 1



The required clearance height: $H_F = H + .59$ in. (15 mm) (with .20 lbs/ft (0.3 kg/m) fill weight). Please consult igus® if space is particularly restricted.

R	1.10 (028)	1.50 (038)	1.89 (048)
H*	2.95 (75)	3.74 (95)	4.53 (115)
D	2.68 (68)	3.07 (78)	3.46 (88)
K	5.12 (130)	6.30 (160)	7.68 (195)

igus®

09

Short Travels - Unsupported



Unsupported E-Chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height. Please refer to **Installation dimensions** for further details.

Legend

- S = Length of travel
- R = Bending radius
- H = Nominal clearance height
- D = Overlength E-Chain® radius in final position
- $K = \pi \cdot R + \text{safety buffer}$
- H_F = Required clearance height

Pitch per link: = .79" (20 mm)

Links per ft (m): = 15.24 (50)

For center mount applications:

Chain length = $\frac{S}{2} + K$

PDF: www.igus.com/e-chain-pdfs
Specs/CAD/RFQ: www.igus.com/e-chains
RoHS info: www.igus.com/RoHS



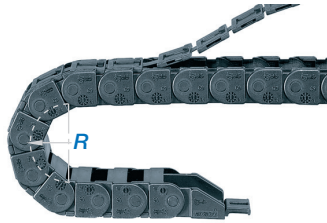
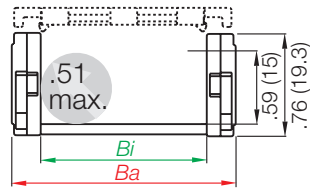
Speed / acceleration FL_G	max. 65.6 ft/s (20 m/s) / max. 656 ft/s² (200 m/s²)
Speed / acceleration FL_B	max. 9.84 ft/s (3 m/s) / max. 19.69 ft/s² (6 m/s²)
Gliding speed / acceleration (maximum)	max. 32.8 ft/s (10 m/s) / max. 164 ft/s² (50 m/s²)
Material - permitted temperature	igumid G / -40°F (-40°C) up to +248°F (+120°C)
Flammability Class, igumid G	VDE 0304 IIC UL94 HB

Technical Data



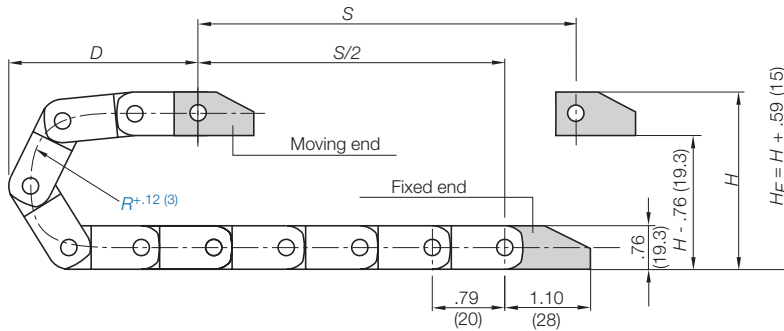
Details of material properties

► Chapter 1

Series 09 - zip open along the outer radius

Part Number Structure

09-	20-	038-	0
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Color - Black
 Bending radius
 Width
 Series



Supplement part number with required radius. Example: 09-20-**038**-0

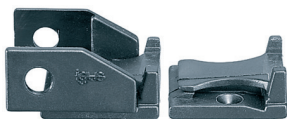
Pitch: .79 in. (20 mm) per link links/ft (m) = 15.24 (50)

Part Number		Bi in. (mm)	Ba in. (mm)	Weight lbs/ft (kg/m)
09-10-		.39 (10)	.72 (18.2)	≈ 0.14 (0.21)
09-16-		.63 (16)	.95 (24.2)	≈ 0.16 (0.24)
09-20-		.79 (20)	1.11 (28.2)	≈ 0.17 (0.25)
09-30-		1.18 (30)	1.50 (38.2)	≈ 0.19 (0.28)
09-40-		1.57 (40)	1.90 (48.2)	≈ 0.21 (0.31)
09-50-		1.97 (50)	2.29 (58.2)	≈ 0.23 (0.34)

Choose from the radii below for all of the above sizes

Radius (mm) Example: 09-20-**038**-0

	028	038	048
R	1.10 (028)	1.50 (038)	1.89 (048)
H*	2.95 (75)	3.74 (95)	4.53 (115)
D	2.68 (68)	3.07 (78)	3.46 (88)
K	5.12 (130)	6.30 (160)	7.68 (195)

Additional Accessories


Quicksnap - the complete, detachable mounting unit, upon request

Part No.

080-20-QS

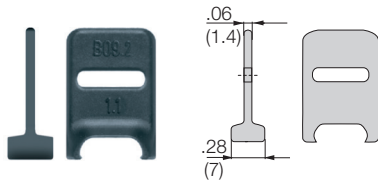
080-30-QS

E-Chain System® Zipper Series 09 Mounting Brackets



09

Interior Separation

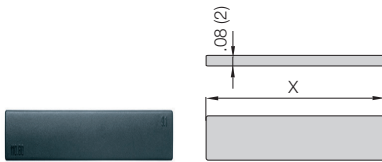


Slotted separator

Unassembled	Part No. B09-2
Assembled	Part No. B09-2-1

- **Separator B09-2**
is used when vertical separation is required. Due to its slot, it allows basic vertical/horizontal shelving arrangements.

Full-width shelves - for the standard interior separation



Full width shelf

Unassembled	Part No. 110-X
Assembled	Part No. 111-X

- **Full width shelf**
is used in applications with many thin cables with similar diameters.

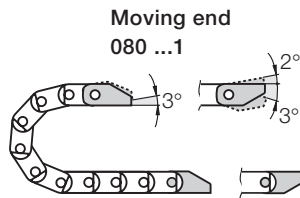
Width X in. (mm)	Part No. Unassembled	Part No. Assembled	Width X in. (mm)	Part No. Unassembled	Part No. Assembled	Width X in. (mm)	Part No. Unassembled	Part No. Assembled
0.63 (16)	110-16	111-16	1.18 (30)	110-30	111-30	1.97 (50)	110-50	111-50
0.79 (20)	110-20	111-20	1.57 (40)	110-40	111-40			

Mounting Brackets - Plastic



Plastic, pivoting

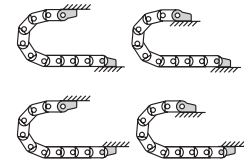
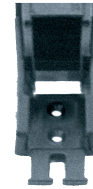
- One-piece mounting bracket
- Corrosion resistant
- Available preassembled
- Inner and outer attachment possible
- Available with or without strain relief tiewrap plates



Moving end
080 ...1



Fixed end
080...2

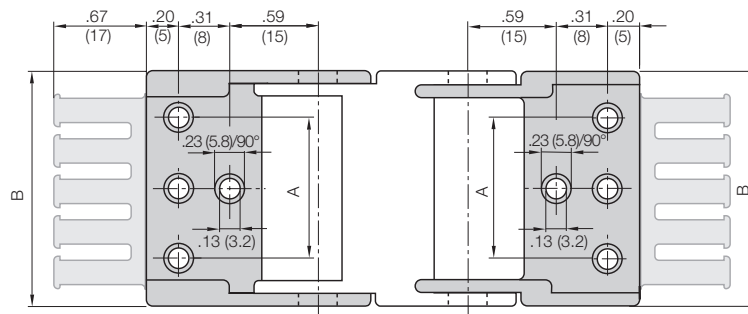


Possible installation configurations -

Part Number Structure

080- 20- 12 PZ

- With assembled strain relief tiewrap plates
- Complete Set
- Width
- Mounting brackets for selected chain type



Full set, for both ends:

080- 20- 12 Full set, each part with pin/bore

Single-part order:

080- 20- 1 Mounting bracket with bore

080- 20- 2 Mounting bracket with pin

080-10-12 - 080-20-12:

Center bores only

080-30-12 - 080-50-12:

Outer bores only

Chain Type	Part No. Full set with Tiewrap Plate	Part No. Full Set without Tiewrap Plate	Dimension A in. (mm)	Dimensions B in. (mm)	Number of Teeth
09-10	080-10-12PZ	080-10-12	— —	.72 (18.2)	1
09-16	080-16-12PZ	080-16-12	— —	.95 (24.2)	2
09-20	080-20-12PZ	080-20-12	— —	1.11 (28.2)	2
09-30	080-30-12PZ	080-30-12	.87 (22)	1.50 (38.2)	3
09-40	080-40-12PZ	080-40-12	1.26 (32)	1.90 (48.2)	4
09-50	080-50-12PZ	080-50-12	1.65 (42)	2.29 (58.2)	5

PDF: www.igus.com/e-chain-pdfs
Specs/CAD/RFQ: www.igus.com/e-chains
RoHS info: www.igus.com/RoHS

